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(71) Applicant: LIFESCAN, INC. [US/US]; 1000 Gibraltar Drive, Milpitas, CA 95035-6312 (US).

(72) Inventors: YU, Yeung, Siu; 3158 Paseo Robles, Pleasanton, CA 94560 (US). SHAH, Mahesh; 1759 Jones, Santa Clara, CA 95051 (US).

(74) Agent: FIELD, Bret, E.; Bozicevic, Field & Francis LLP, Suite 200, 200 Middlefield Road, Menlo Park, CA 94025 (US).

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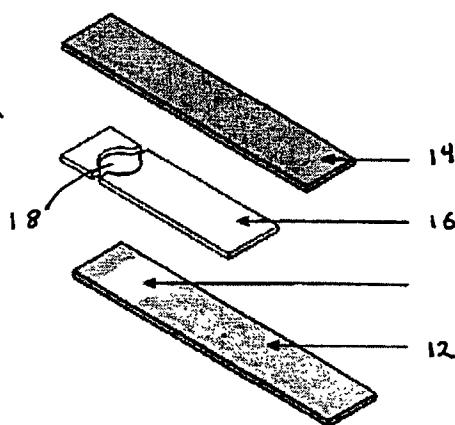
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(54) Title: ELECTROCHEMICAL TEST STRIP FOR USE IN ANALYTE DETERMINATION



(57) **Abstract:** Electrochemical test strips and methods for their use in the detection of an analyte in a physiological sample are provided. The subject test strips have a reaction zone defined by opposing metal electrodes separated by a thin spacer layer. The metal surface of at least one of the electrodes is modified by a homogenous surface modification layer made up of linear self-assembling molecules having a first sulphydryl end group and a second sulfonate end group separated by a short chain alkyl linking group, where 2-mercaptopropane sulfonic acid or a salt thereof is preferred in certain embodiments. The subject electrochemical test strips find application in the detection of a wide variety of analytes, and are particularly suited for use the detection of glucose.

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## INT'L NATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G01N27/327 C12Q1/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12Q G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, BIOSIS, MEDLINE, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 030 310 A (WOGOMAN FRANK W) 9 July 1991 (1991-07-09) abstract ---	1,6,12, 16,21
A	EP 0 971 036 A (KYOTO DAIICHI KAGAKU KK) 12 January 2000 (2000-01-12) examples ---	1,6,12, 16,21
A	WO 99 19507 A (FORROW NIGEL J ;WALTERS STEPHEN (GB); WATKIN JARED L (GB); ABBOTT) 22 April 1999 (1999-04-22) examples --- -/-	1,6,12, 16,21

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Name and mailing address of the ISA  
European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Moreno, C

## INT'L NATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>NUNES, G. S. ET AL: "Evaluation of a highly sensitive amperometric biosensor with low cholinesterase charge immobilized on a chemically modified carbon paste electrode for trace determination of carbamates in fruit, vegetable and water samples"  ANAL. CHIM. ACTA (1999), 399(1-2), 37-49 ,  XP001058432  the whole document</p> <p>---</p>	1,6,12, 16,21
A	<p>SHIMOJO, NOBUO ET AL: "Electrochemical assay system with single-use electrode strip for measuring lactate in whole blood"  CLIN. CHEM. (WASHINGTON, D. C.) (1993),  39(11, PT. 1), 2312-14 ,  XP001052849  the whole document</p> <p>-----</p>	1,6,12, 16,21

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Interr. / Final Application No

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